

1. **Full name of the faculty member:** Dr. Chaitali Chakraborty
2. **Designation:** Associate Professor
3. **Specialisation:** Dairy Chemistry
4. **Contact information:** Phone:7003218917 e-mail ID:ccty09@gmail.com
5. **Academic qualifications:**

College/ university from which the degree was obtained	Abbreviation of the degree
WBUAFS	PhD (Dairy Chemistry)
WBUAFS	M.Sc. (Dairy Chemistry)
WBUAFS	B.Tech (Dairy Technology)

6. **Positions held/ holding or Work Experience:**18 Years

7. **Awards:**

1. Got **Urmibala Memorial Gold Medal** for excellence in B.Tech, Dairy Technology (2002) from Indian Dairy Association (Eastern Zone), January, 2003.
2. Awarded by **Prof. Sukumar De Gold Medal** for securing 1st position in B.Tech, Dairy Technology (2002); given by West Bengal University of Animal and Fishery Sciences, April, 2007.
3. Awarded **First prize** for the poster presentation on “**Comparison on Textural and Antimicrobial Activity of Different types of Laboratory made and Marker Herbal Sandesh**” in the XXXIX National Dairy Industry Conference at EZCC, Saltlake, held on 4-6th February, 2011.
4. Awarded **FirstPrize** for the poster presentation on “**Production and use of potato powder in Indian Traditional Sweets**”, in the **National Seminar** on Recent Advances in the Development of Fermented Foods, at the Centre of Food Science and Technology, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi, held on 8-9th April 2011
5. Awarded **Second Prize** for the poster presentation on “**Studies on the Development of a Fermented Food by the combination of soymilk & Peanut milk**”, in the **National Seminar** on Recent Advances in the Development of Fermented Foods, at the Centre of Food Science and Technology, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi, held on 8-9th April 2011.
6. First prize awarded for poster presentation on “**Studies on the Antioxidant and Antimicrobial Activity of Indian Medicinal Herbs and Herbal Whey Drink**” in AICTE sponsored National Seminar on a theme “Recent Advances in the Development of Natural Antioxidants” on March 12-13, 2013 at Food Technology Department, Gurunanak Institute of Technology, Kolkata, W.B.
7. Awarded **Second prize** for poster presentation on “**Food Waste: Mine of Polyphenol**” in UGC-Sponsored National Level Seminar on Food Security and Sustainable Nutrition In India: The Present Scenario” Organized by Department of Food and Nutrition, Acharya Prafulla Chandra College in

collaboration with Department of Biochemistry & Nutrition, All India Institute of Hygiene and Public Health at Kolkata held on 15-16th Sept., 2016.

8. Awarded **Second** for poster presentation on the topic “**Banana Peel Muffin: A Great Way of Waste Utilization**” in National Seminar on “ A Dairy Snapshot-2017 ” Organized by IDA (EZ), Kolkata in association with Faculty of Dairy Technology, WBUAFS, Nadia held on 5th August, 2017.

9. Received **Best Paper Award** for the article published in Indian Dairyman 2016 entitled “Advancements in Packaging of Milk and Milk Products” in the 46th Dairy Industry Conference at Kochi, Kerala during 8-10 February, 2018.

10. Received **Best Paper Award** on the topic “**Application of Optical Sensors in Determination of Light Absorbents of Purple Cabbage Fortified Lime Squash**” in the EDCT 2018, International Conference on Emerging Trends in Electronic Devices and Computational Techniques, Technically Co-Sponsored by IEEE Kolkata Section, organized by Guru Nanak Institute of Technology during 8-9 March, 2018.

11. Received **Best Poster Award** on the topic “**Enzymatic modification of Whey Protein Isolates using food grade enzymes and it's resulting functional properties**” in the National Seminar on “ Traditional Indian Dairy Products- Prospects of Commercialization” Organized by the National Agricultural Higher Education Project (NAHEP)- Innovation Grant, at the Faculty of Dairy Technology, WBUAFS, Nadia held on 13th March, 2020.

12. Awarded **Second** for poster presentation on the topic “**Textural Quality of Paneer added with Nisin**” in the National Seminar on “Traditional Indian Dairy Products- Prospects of Commercialization” Organized by the National Agricultural Higher Education Project (NAHEP)- Innovation Grant, at the Faculty of Dairy Technology, WBUAFS, Nadia held on 13th March, 2020.

13. Awarded **Second** for poster presentation on the topic “Efficacy of Inulin and Whey protein concentrate as fat replacers on Physicochemical, microbiological, textural and sensory characteristics of low fat paneer” in the National Symposium on “Emerging practices in animal husbandry and fisheries vis-à-vis climate change” on 1st July, 2023 organized by Indian Journal of Animal Health, Kolkata.

14. Awarded **First** position for paper presentation on the topic “Instrumental Evaluation of Non- Dairy Fat Adulteration in Ghee” in the “Innovations in Food Processing: Health, Nutrition and Sustainability (IFPHNS - 2026)” on 20th and 21st January, 2026, organized by the Department of Food Science, MAKAUT, W.B., In Collaboration with AFSTI-Calcutta Chapter.

8. Publication:

a. Journals (National & International): with NAAS, IF rating

1. Kant, R., **Chakraborty, C.**, Rout P., Roy T. and Dutta, S. (2024). A comprehensive evaluation of inulin and whey protein concentrate as fat replacers in low-fat paneer: Physicochemical, textural and sensory studies, *Food and Humanity*, 2 (2024) 100240, <https://doi.org/10.1016/j.foohum.2024.100240>
2. Rout P., **Chakraborty, C.** and Hossain, S. (2024). Functional characterization of enzyme-hydrolysed soy and whey protein isolates: A comparative approach, *Food Chemistry Advances*, 5 (2024)100745, <https://doi.org/10.1016/j.focha.2024.100745>
3. **Chakraborty C.**, Mukherjee S. and Biswas S. (2019). Evaluation of rheological, physicochemical, and sensory properties of apple incorporated yoghurt, *Indian J Dairy Sci*, 72(1): 53-58, ISSN: 0019-5146
4. Bandyopadhyay, K., Ganguly, S., **Chakraborty, C.** and Roychowdhury R. (2019). A Relative Study on Utilisation of Fenugreek Seeds for Enhancement of the Antioxidant Activities in Various Baked Products, *SSRG International Journal of Agriculture & Environmental Science (SSRG - IJAES)*– 6(1): 67-70, ISSN: 2394 – 2568.
5. Dasgupta R., **Chakraborty C.**, Bandyopadhyay K. and Ganguly S. (2019). Development and characterization of biocolor (*Brassica oleracea* var. *capitata* F. *rubra*) fortified lime squash, *The Pharma Innovation*, 8(1): 42-47, ISSN: 2277-7695
6. Bandyopadhyay, K., Ganguly, S., **Chakraborty, C.** and Modak A. (2018). Studies on extraction of polyphenols from food wastes and its utilization for fortification of polyphenols, *International Journal of Agricultural Engineering*, 11(1): 216-219, ISSN: 0976-7223.
7. Maji, S., Ray, P.R., Ghatak, P.K. and Chakraborty, C. (2018). Total phenolic content (TPC) and quality of herbal lassi fortified with Turmeric (*Curcuma longa*) extract, *Asian J. Dairy & Food Res*, 37(4):273-277, ISSN:0976-0563
8. Guhathakurta, S., **Chakraborty, C.** and Bandyopadhyay, K. (2017). Studies on Utilization of Milk for Extraction of Polyphenols from Date Palm (*Phoenix dactylifera* L.). *Indian Journal of Dairy Science*, 70(1):116-118, ISSN:0019-5146
9. Ray, P.R., Ghatak, P.K., **Chakraborty, C.** and Maji, S. (2017). Effect of banana (*Musa paradisiaca*) pseudostem juice on proteolytic and lipolytic changes in cow milk during storage, *Asian J. Dairy & Food Res*, ISSN:0976-0563, 36(2):117-121

b. Popular Articles:

1. Banerjee, P.; Chakraborty, P.; Debnath, A.; **Chakraborty, C.**, Pradip Kumar Roy, P.K.; Kalla, A.M.; Subhadip Manik, S. and Debnath, P.P. (2025). Quantum Dots in Milk Adulteration, *Indian Journal of Veterinary Public Health*, 11 (1): 7-15.

2. Rout P. and **Chakraborty, C.**(2020). The Commercial Application of Biosensors as an Analytical Device, *International Journal of Current Microbiology and Applied Sciences* ,9 (5): 864-880, ISSN: 2319-7706

3. **Chakraborty, C.**, Ray, P.R., Chatterjee, R. and Roy, M. (2019). Applications of bio-colour in dairy industry, *The Pharma Innovation*, 8(1): 126-138, ISSN: 2277-7695

c. Books:

1. Chakraborty, C.(2021). A Handbook on Fat Rich Dairy Products, Elite Publishing House, New Delhi, ISBN: 978-93-5899-836-8.

2. Chakraborty, C.(2021). The Physical Chemistry of Milk- A Comprehensive Guide, Elite Publishing House, New Delhi, ISBN: 978-93-7108-317-1.

3. Chakraborty, C.(2021). Cheese Chemistry and Biochemistry- Principles and Applications, Elite Publishing House, New Delhi, ISBN: 978-93-71080-67-5.

4. Chakraborty, C. and Rout P. (2024). MCQ Book on Dairy Chemistry and Food Chemistry. Brillion Publishing. ISBN: 978-81-971129-8-0, e-ISBN: 978-81-971129-9-7.

5. Chakraborty, C.(2025). Chemistry of Concentrated and Dried Milk, NIPA Genx Electronic Resources & Solutions P.Ltd., New Delhi. ISBN: 978-93-5887-942-1, e-ISBN: 978-5887-257-6.

d. Books chapter:

1. Chakraborty, C. and Rout P. (2025).Quality control guidelines and assurance of raw and processed milk In: Handbook of Milk Production, Quality and Nutrition, Academic Press, Pages 649-667, ISBN: 978-0-443-24820-7.

2. Rout P.andChakraborty, C.(2026). Nanotechnology in Food Waste Protein Enhancement In: Food Waste Proteins, Extraction, Modification, and Applications, CRC Press, Pages 254-265. eISBN: 9781003565987.